

CLAIMS

1. A sand core for metal casting, comprising less than about 4% by weight of a lithia-containing material, at least about 1% by weight of ferric oxide, and the balance of core sand and a core sand binder, all formed into a sand core.
2. The sand core of claim 1 wherein the amount of ferric oxide comprises about 1% by weight.
3. The sand core of claim 2 comprising equal amounts by weight of the lithia-containing material and ferric oxide, and wherein the core sand comprises lake sand.
4. The sand core of claim 2 comprising about 2.5% by weight of the lithia-containing material and wherein the core sand comprises a silica sand.
5. A mixture for forming a sand core, comprising about 1.5% to about 3.5% by weight of a lithia-containing material, at least about 1% by weight of ferric oxide, and the balance of core sand and a core sand binder.
6. The mixture of claim 5 wherein the amount of ferric oxide comprises about 1% by weight.
7. The mixture of claim 5 wherein the lithia-containing material comprises about 1% to about 2.5% by weight.
8. The mixture of claim 7 wherein the lithia-containing material comprises about 2.5% by weight, and wherein the core sand comprises a silica sand.
9. The mixture of claim 6 wherein the lithia-containing material comprises about 1% by weight and wherein the core sand comprises lake sand.
10. A method of making a sand core for casting, comprising uniformly mixing together a core sand, an effective amount of binder, about 1% to about 3.5% by weight of a

lithia-containing material, and about 1% by weight of ferric oxide as a core-forming material, and forming the core-forming material into a sand core.

11. The method of claim 10 wherein the core-forming material contains about 1% by weight of a lithia-containing material.

12. The method of claim 10 wherein the lithia-containing material is the VEINSEAL® 14000 product of Industrial Gypsum, Inc.

13. A method of making a sand core for casting, comprising uniformly mixing together a core sand, an effective amount of core sand binder, an anti-veining material comprising less than about 4% by weight of a lithia-containing material and at least about 1% by weight of ferric oxide as a core-forming mixture and thereafter forming the core-forming mixture into a sand core.

14. The method of claim 13 wherein an anti-veining material comprises about 1% to about 3.5% by weight of the lithia-containing material and at least about 1% by weight of ferric oxide.

15. The method of claim 14 wherein the lithia-containing materials is selected from a group consisting of . -spodumene, amblygonite, montebrasite, petalite, lepidolite, zinnwaldite, eucryptite and lithium carbonate.